

# Recombinant Anti-ULK3 Rabbit mAb

Catalog # AP95086

## Product Information

|                   |                        |
|-------------------|------------------------|
| Application       | WB, IHC, FC, IF/IC     |
| Primary Accession | <a href="#">Q6PHR2</a> |
| Reactivity        | Human, Mouse, Rat      |
| Host              | Rabbit                 |
| Clonality         | Monoclonal             |
| Calculated MW     | 53444                  |

## Additional Information

|                    |                                                                                                                        |
|--------------------|------------------------------------------------------------------------------------------------------------------------|
| Gene ID            | 25989                                                                                                                  |
| Other Names        | Serine/threonine-protein kinase ULK3; Unc-51-like kinase 3                                                             |
| Target/Specificity | KLH-conjugated synthetic peptide encompassing a sequence within human ULK3 protein. The exact sequence is proprietary. |
| Dilution           | WB~~WB (1/500 - 1/1000) IHC~~1:100~500 FC~~1:10~50 IF/IC~~N/A                                                          |
| Format             | Liquid in PBS, pH 7.3, 50% glycerol, 0.05% BSA, and 0.05% Proclin300.                                                  |
| Storage            | Store at -20 °C.Stable for 12 months from date of receipt                                                              |

## Protein Information

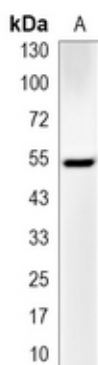
|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name              | ULK3 {ECO:0000303 PubMed:19878745, ECO:0000312 HGNC:HGNC:19703}                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Function          | Serine/threonine protein kinase that acts as a regulator of smoothened signaling and autophagy (PubMed: <a href="#">19279323</a> , PubMed: <a href="#">19878745</a> , PubMed: <a href="#">20643644</a> , PubMed: <a href="#">31279575</a> ). Acts as a positive regulator of smoothened signaling in the presence of hedgehog (DHH, IHH or SHH) ligand: autophosphorylates and mediates phosphorylation of full-length GLI2, promoting subsequent phosphorylation by CDK1 and GLI2 dissociation from SUFU and translocation to the nucleus (PubMed: <a href="#">19878745</a> , PubMed: <a href="#">20643644</a> , PubMed: <a href="#">31279575</a> ). Also phosphorylates as GLI1 and GLI3, although less efficiently (PubMed: <a href="#">19878745</a> , PubMed: <a href="#">20643644</a> ). In the absence of hedgehog ligand, interacts with SUFU, thereby inactivating the protein kinase activity and preventing phosphorylation of GLI proteins (GLI1, GLI2 and/or GLI3) (PubMed: <a href="#">20643644</a> ). Also acts as a regulator of autophagy: following cellular senescence, able to induce autophagy (PubMed: <a href="#">19279323</a> ). |
| Cellular Location | Cytoplasm. Note=Localizes to pre-autophagosomal structure during cellular senescence.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

## Tissue Location

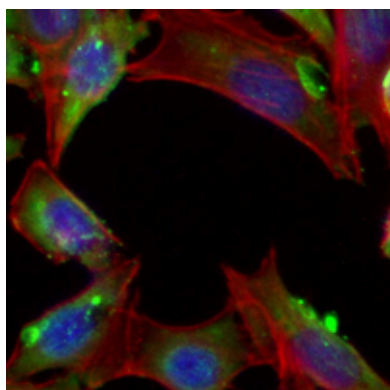
Widely expressed. Highest levels observed in fetal brain. In adult tissues, high levels in brain, liver and kidney, moderate levels in testis and adrenal gland and low levels in heart, lung, stomach, thymus, prostate and placenta. In the brain, highest expression in the hippocampus, high levels also detected in the cerebellum, olfactory bulb and optic nerve. In the central nervous system, lowest levels in the spinal cord

## Images

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Western blot analysis of ULK3 expression in HEK293T (A) whole cell lysates. (Predicted band size: 53 kD; Observed band size: 53 kD)



Immunofluorescent analysis of ULK3 staining in HEK293T cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with an AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.